Since then, I have discovered a very helpful paper on the subject, which discusses the psychodynamics of the situation with particular emphasis on prevention.[2]

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A population based dynamic approach for estimating the cost effectiveness of screening for *Chlamydia trachomatis*

We read the recent paper in *STI* on cost effectiveness for *Chlamydia trachomatis* screening by Honey *et al* with great interest.[1] We concur with their conclusion that more data derived from clinical trials are needed for policy making, particularly when considering the evidence on the subsequent risk of pelvic inflammatory disease (PID) in women who test positive for *Chlamydia trachomatis*.

Our paper[2] was included and discussed in this review. As our approach was rather complex, we note that some parts of our design and results may have been misinterpreted. Honey *et al* note that our study was focused on screening both men and women in general practice with an age range for evaluation of 15–64 years. Although this information is correct, it does not reflect that screening for women only was considered separately and that women older than 34 years were not included in the screening programme. This misinterpretation by Honey *et al* formed the basis for exclusion of our study from further systematic review.[1]

Our approach differs from others' in that we investigate cost effectiveness by employing a population based dynamic model (Monte Carlo simulation).[2 3] This approach enables us to simulate the *C trachomatis* transmission, the impact of prevention measures on the *C trachomatis* incidence and prevalence, and the risk for *C trachomatis* infection in a population. As a result, indirect effects (for example, future partners of current partners) over a period of several years can be considered using rates of partner change, mixing patterns, and transmission probabilities. We chose to analyse the screening programme over a period of 10 years. In our baseline analysis we assessed screening of men and women aged 15–24 years. However, in the scenario analysis we evaluated several other screening strategies, including screening of women aged 15–24, 15–29, and 15–34 years.

Despite the restriction of *C trachomatis* screening to the age groups labelled as ''young'' women, an evaluation of the transmission dynamics of *C trachomatis* in the population as described by our dynamic model requires the inclusion of men and older women in the model. For example, it may well be that *C trachomatis* is transmitted from a young woman to a man, from this man to an older woman, etc. Such transmission chains may occur over a period of years and may involve men and women of all ages. So, to adequately evaluate screening of women aged 15–24, a model is required that considers all sexually active age groups. Therefore, sexual activity was modelled for both men and women aged up to 64 years, using assumptions based on a Dutch Sex Survey.

Application of our model to the Netherlands showed that screening women aged 15–24, 15–29, and 15–34 years over a period of 10 years would result in net cost savings to society. When including (excluding) indirect costs, cost savings were reached after 2.8 (3.8) years, 3.1 (4.3) years and 3.3 (5.0) years, respectively. This evaluation considered the costs of screening (polymerase chain reaction testing, azithromycin treatment, GP fee) and partner referral as well as direct (medical) savings as a result of averted health care and indirect savings as a result of averted productivity loss.

We think that our dynamic approach leads to more realistic assessments of cost effectiveness in this area as it appropriately considers the highly infectious character of *C trachomatis*. At this time, our approach is being used to evaluate the cost effectiveness of *C trachomatis* screening programmes in two other European countries.

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Contamination of environmental surfaces by genital human papillomaviruses (HPV): a follow up study

In a previous study we investigated the contamination of environmental surfaces with human papillomavirus (HPV) DNA in two genitourinary medicine (GUM) clinics.[1] This study was intended to review the GUM clinic in which HPV DNA was found to be present. Cleaning with ''general purpose neutral liquid detergent'' (detergent) (Youngs Detergents, Lancare Ltd, UK) and water, or 2% Clearsol (disinfecting detergent, 40% VV Tar Acids; Coventry Chemicals Ltd, Coventry, UK) in 70% methylated spirits (Clearsol) was performed following the results of the previous study.

Twenty samples were collected from two treatment rooms and patients' toilets at each time of sampling. Samples were tested and typed as described previously.[1] Surfaces sampled, and accumulation of HPV DNA during a single day, are listed in table 1.

Table 1 Method of cleaning used and HPV DNA detection

	Sample 1, 16.30	Sample 2, 8.30	Sample 3, 16.30
	Detergent	Clearsol and methylated spirits	
Female treatment room			
Treatment/examination bed	11, 16	None	None
Light switch	6, 16	None	None
Examination lamp	None	None	None
Male treatment room			
Treatment/ examination bed	None	None	None
Light switch	16	None	6, 18
Examination lamp	None	None	None
Female toilet			
Light switch	None	None	None
Toilet flush handle	None	None	None
Toilet seat	None	None	None
Door handle	None	None	None
Cold tap	None	None	None
Hot tap	16	None	None
Male toilet			
Door handle	16	None	None
Hot tap	None	None	None
Cold tap	None	None	None
Light switch	None	None	None
Toilet seat	11, 16	None	None
Cryoguns			
1	6, 16, 58	Pos (6)	Pos (6, 11, 16, 18)
2	6	None	Pos (11)
3	16	None	Pos (6)

Sampling was performed at 08.30 on two consecutive days and a third set of samples was collected at 16.30, the end of the clinic hours, on day 2.

Following cleaning with detergent and water at the end of the working day (sampling 1), nine of the 20 surfaces tested were contaminated. It was decided to clean surfaces with a more stringent agent. After subsequent cleaning with Clearsol solution HPV DNA was present on one surface at the beginning of the day, and on four at the end of the day.

β Globin DNA was detected in all HPV DNA positive samples, indicating HPV was cell associated, and in a further five samples taken at the end of the day from HPV DNA negative surfaces.

Compared to our previous study a 50% reduction in surface contamination with HPV DNA was found after cleaning with detergent and the number of types detected was reduced. Only HPV types 6, 11, 16, and 58 were detected on the nine different surfaces. This is also a 73% reduction in the number of types detected in our previous study.[1] HPV types 6, 11, and 16 were still the most common types found (all types in table 1).

Three of the samples positive for β globin DNA but negative for HPV DNA were from the patients' toilets and/or the male clinic examination couch. On the examination lamp switch and the edge of the examination couch in the patients treatment room, DNA was probably from the doctors' gloves, whereas β globin DNA detected on the surfaces sampled in the patients' toilets was probably the result of cells shed naturally.

Cleaning with Clearsol was more effective then cleaning with a detergent, which was more effective than no cleaning, but not sufficient.

Early in the 20th century Ignaz Philipp Semmelweis showed that hand washing with soap/water was not as effective as washing with ethanol.[2] It has also been shown that alcohol based disinfectants have a better efficacy than antiseptic soaps.[3 4] Different antiseptics and decontaminants, whether water or alcohol based, may have different viricidal efficiencies.[5 6] There are few data on environmental decontamination; however, this study suggests cleaning with Clearsol/methylated spirit is reasonably effective at decontaminating environmental surfaces, but contamination will recur unless cleaning is performed regularly.

Contributors

The principal author SS, with the co-author HS, collected the samples, and performed the PCR and the reverse hybridisation on the environmental samples; CS supervised the sample collection in GUM clinic and was co-author; JG supervised the project and was senior author.

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Issues associated with the introduction of circumcision into a non-circumcising society

A team lead by Kebaabetswe propose the introduction of infant circumcision in Botswana, based on:

- a survey of its acceptability to Batswana (people of Botswana)
- its practice in certain Western nations, and
- its alleged value in preventing HIV infection.[1]

There are several medical, psychological, sexual, social, ethical, and legal problems with this proposal.

Medical effects

Male neonatal circumcision is not an innocuous procedure. There are many complications ranging from trivial to life threatening. Complications generally include bleeding, infection, and surgical accident, including penile necrosis and penile amputations.[2] Bleeding or infection can progress to death.[3 4] It is difficult to control complications with mass circumcisions.[5] Circumcision excises significant amounts of nerve bearing penile skin and mucosa, especially the ridged band structure near the mucocutaneous boundary.[6] The protective effects of circumcision against HIV remain controversial.[7] UNAIDS has not accepted circumcision as a useful public health measure.

In neighbouring South Africa, many children are infected with HIV.[8] This is attributed to unsafe health care.

Circumcision creates an open wound through which infection may proceed.[9] It is not clear that safe aseptic circumcisions can be delivered in Botswana. It is possible that mass circumcision may worsen the epidemic.

Psychological effects

Psychological manifestations of circumcision have been an area of study at Bond University.

Neonatal circumcision is an intensely painful, traumatic, and stressful operation.[10] General anaesthesia is unsafe in the newborn. Available methods of anaesthesia are only partially effective.[10] Circumcised infants show hypersensitivity to pain suggestive of post-traumatic stress disorder (PTSD).[11] Our study of the incidence of PTSD in the Philippines found extensive PTSD in circumcised boys.[12] PTSD secondary to neonatal circumcision has been documented in adult males.[13] Victims of trauma tend to re-enact their trauma either on themselves or others in a cycle of violence.[14] Circumcised males may rely on psychological defence mechanisms such as rationalisation and denial, and strongly avoid thoughts, feelings, or conversations about circumcision.[15]

There are additional concerns. The state of the phallus is closely related to a man's sense of wellbeing.[16] Men who were circumcised neonatally may feel unhappy about being circumcised, experience significant anger, sadness, feeling incomplete, cheated, hurt, concerned, frustrated, abnormal, and violated. In addition, circumcised men may suffer from resultant low self esteem,[16] which frequently can result in a host of disordered behaviours.

Circumcision may be difficult to eradicate from a society once it is introduced. In addition, to the re-enactment described above,[16] Goldman reports that circumcised men tend to defend the practice.[16] Circumcised doctors tend to develop intellectual arguments to support genital cutting.[17] Fathers who are circumcised may adamantly insist on a son's circumcision in an emotional defence against their own painful feelings of grief for a lost body part and reduced sexual function.[18] Kebaabetswe *et al* (p 217) reported that, ''Being circumcised was the only significant predictor for a man who would definitely or probably circumcise a male child.''

Sexual effects

As noted above, circumcision excises large amounts of skin and mucosa from the penis. The removal of the prepuce tightens the remaining skin and makes it relatively immobile. Since stimulation of the sex nerves normally occurs by movement of the mobile skin, this further desensitises the penis,[17] perhaps even more than the removal of the ridged band of erogenous nerves noted by Taylor.[6] Excision of sexual nerve endings necessarily reduces sensory input. A decrease in sensation may therefore decrease the sexual response.[19 20]

Male circumcision also may adversely affect female sexual response. A survey of women found that they were markedly less likely to have an orgasm with a circumcised partner.[21]

Social effects

There has been little study of social problems that may occur when entire cohorts of males are circumcised and consequently most of the men in a society bear physical and psychological wounds associated with circumcision.

We might expect more dependence on alcohol to relieve the symptoms of PTSD. Low self esteem may generate a feeling of shame. Shame may generate problems with